

REMARKS/ARGUMENTS

Claims 1-11, 25-32 are currently pending in the above-identified application. Non-elected claims 12-24 have been cancelled. Claims 1-11 have been rejected in the Office Action dated August 29, 2002. Claims 1, 6, 9-11 have been amended and claims 25-32 have been added. Applicants respectfully request reconsideration in light of the foregoing amendments and following remarks.

Claims 1 and 6 have been rejected because of the informalities “a” in line 8 of claim 1 and “a” in line 1 of claim 6. Claims 1 and 6 have been amended as requested. Accordingly, the objections to claims 1 and 6 should be withdrawn.

Claims 9-11 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9-10 have been amended to supply the missing antecedent basis for the term “standard”. Claim 11 was rejected solely due to its dependency upon rejected claim 9, which has been corrected. Claim 11 has been amended to more clearly claim subject matter and not for patentability purposes. Accordingly, the rejection of claims 9-11 should be withdrawn.

Claims 1-11 stand rejected under 35 USC § 102(b) as being anticipated by Green, et al (U.S. Patent No. 6,091,079). Applicant respectfully traverses the rejection and requests reconsideration.

The present invention is directed to, *inter alia*, a testing apparatus on a die which has a standard test probe pad for supplying a voltage signal to the die. The standard test probe pad is coupled to a fuse which is itself coupled to a secondary test probe pad. The secondary test probe pad is in turn coupled to a sacrificial test probe pad. The sacrificial test probe pad is coupled to a sacrificial metal bus on a die in a wafer. Other features of the invention as recited in various claims are also discussed below. The Office Action states that that Green discloses the “a voltage interruption device 42 provided between said first and second terminals” as in claim 1. (OA p. 3, second paragraph) However, Green in fact discloses that fuse 42 is interposed between the *conductive line 24* and the sacrificial Vcc pad 36, not between two terminals as in claim 1. (FIG. 3; Col. 5, lines 10-16; lines 33-35) Accordingly, claim 1 is allowable over Green and the rejection of claim 1 should be withdrawn.

The Office Action on page 3 states that claim 2 is anticipated by Green and indicates that each die 12 further comprises a first on-die sacrificial conductive line. The Office Action points to the line between pad 36 and pad 40 in Green's figure 3. However, Green discloses that pad 36 is a cycling test pad 40 which is coupled to sacrificial Vcc pad 36 (FIG. 3) as well as test cycling circuitry associated with each die 12 for supplying power to test cycling circuitry *on the die* (Col. 4, lines 56-60). Green does not disclose, *inter alia*, “a first on-die sacrificial conductive line provided between the first sacrificial terminal and second terminal” with a first sacrificial terminal and second terminal as recited in dependent claim 2. Accordingly, claim 2 is allowable over Green and the rejection of claim 2 should be withdrawn for at least the foregoing reasons.

Claim 3 - 8 are dependent on claim 1 and thus are allowable for the reasons stated above and for other reasons.

Amended claims 9-11 are rejected for similar reasons as in claims 1-8 and therefore should be withdrawn for at least the reasons stated above. For example, the Office Action on page 5 states that Green discloses a fuse 42 interconnected between a first Vcc bonding pad 34 and a secondary Vcc pad 36. However, Green discloses a fuse 42 disposed between a sacrificial conductive line 24 and a sacrificial Vcc pad 36 (FIG. 3), not between a first Vcc bonding pad and a secondary Vcc pad. Claims 10-11 depend from claim 9 and are allowable for at least the same reasons as stated above and for other reasons. Therefore, claims 9-11 are allowable over Green and the outstanding rejection should be withdrawn.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **“Version with markings to show changes made.”**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

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Respectfully submitted,

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Version With Markings to Show Changes Made

1. (Once Amended) A semiconductor wafer comprising:

at least one first sacrificial conductive line for supplying a first voltage to a plurality of dies fabricated on said wafer;

a plurality of integrated circuit dies fabricated on said wafer, each die comprising:

a first terminal coupled to the circuitry within said die for supplying a first voltage to said circuitry;

a second terminal for supplying [a]said first voltage to said first terminal;

a voltage interruption device provided between first and second terminals for interrupting an electrical coupling between said first and second terminals; and

a first sacrificial terminal for receiving said first voltage from said first sacrificial conductive line and supplying said first voltage to said second terminal.

6. (Once Amended) The wafer of claim 5 wherein said fuse is blown when [a]said die draws current in excess of a predetermined value.

9. (Once Amended) A semiconductor die comprising:

a standard Vcc bonding pad coupled to the circuitry within said die for supplying a first voltage to said circuitry;

a secondary Vcc bonding pad;

a fuse interconnected between the standard Vcc bonding pad and the secondary Vcc bonding pad, said secondary Vcc bonding pad supplying said first voltage through said fuse to the standard Vcc bonding pad, said fuse adapted for interrupting electrical coupling between the secondary Vcc bonding pad and said standard Vcc bonding pads when the die draws current in excess of said fuse breakdown current;

a sacrificial Vcc bonding pad for receiving [a] said first voltage; and

a sacrificial metal bus interconnected between the sacrificial Vcc bonding pad and secondary Vcc bonding pad for receiving [a] said first voltage from the sacrificial Vcc bonding pad and supplying said first voltage to the secondary Vcc bonding pad.

10. (Once Amended) The semiconductor wafer of claim 9 further comprising:

a Vss bonding pad coupled to the circuitry within said die for supplying a second voltage to said circuitry;

a sacrificial Vss bonding pad for supplying the second voltage to the standard Vss bonding pad; and

a sacrificial metal bus which connects the sacrificial Vss bonding pad and the standard Vss bonding pad.

11. (Once Amended) The semiconductor die of claim 10 further comprising:

a passivation layer which is provided with respective openings to the sacrificial Vcc and Vss bonding pads; and

Vcc and Vss sacrificial conductive busses formed over said passivation layer, said Vcc sacrificial conductive bus passing through an opening in said passivation layer to connect with said Vcc sacrificial bonding pad and said Vss sacrificial conductive bus passing through an opening in said passivation layer to connect with said Vss sacrificial bonding pad.